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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Supplemental Office Action

2. Claims 16-18 were not explicitly listed in the opening of section 6 of the previous Office Action (discussing 103(a) rejections) dated November 16, 2007. Claims 16-18 are now mentioned in the opening of section 7 of 103(a) rejection, see below. Claims 13-18 and 24 are rejected under 103(a).

Specification

3. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Claim Objections

4. Claims 26-29 objected to because of the following informalities: The term "graduation" in the context of color level seems to mean "gradation". Appropriate correction is required.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 9-12, 19-23, and 25 rejected under 35 U.S.C. 102(e) as being anticipated by Wee *et al.* US 6983049 B2 ("Storage devices for secure scalable data streaming").

Regarding Claim 9, Wee discloses a method to code and decode digital data transmitted or stored according to the prioritized pixel transmission method, wherein the information to be coded or decoded comprises individual pixel groups, wherein each pixel group has a positional value ("The header data describe, for example, the region (e.g., the location of the region within the video frame)," column 9, line 44), at least one pixel value, and a priority value assigned to it ("As recited in step 608, the present embodiment then progressively encrypts the scalable video data to generate progressively encrypted scalable video data," column 9, line 63), said method comprising at least one key used with which the positional value and/or the pixel value/pixel values of a pixel group are selectively coded or decoded ("a scalable

encoder adapted to scalably encode at least one of the regions into scalably encoded data, and a progressive encrypter adapted to progressively encrypt at least a portion of the scalably encoded data into progressively encrypted scalably encoded data," column 4, line 15).

Regarding Claim 10, Wee discloses the method according to claim 9, wherein the key is selectively linked to the type of information content to be coded and/or to the original source, and/or to the transmission medium used, or it contains a temporal relationship ("In one embodiment, only the payload portion is encrypted and encoded. In another embodiment, the payload portion is encrypted and encoded, and the header portion is also encrypted," column 13, line 26).

Regarding Claim 11, Wee discloses the method according to claim 9, wherein each pixel value, or one or more selected pixel values, are coded or decoded using its own separate key ("As recited in step 608, the present embodiment then progressively encrypts the scalable video data to generate progressively encrypted scalable video data," column 9, line 63).

Regarding Claim 12, Wee discloses the method according to claim 10, wherein each pixel value, or one or more selected pixel values, are coded or decoded using its own separate key ("As recited in step 608, the present embodiment then progressively

encrypts the scalable video data to generate progressively encrypted scalable video data," column 9, line 63).

Regarding Claim 19, Wee discloses the method according to claim 9, wherein in that the pixel groups are comprised of digitized scanned values of an audio signal ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Regarding Claim 20, Wee discloses the method according to claim 10, wherein in that the pixel groups are comprised of digitized scanned values of an audio signal ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Regarding Claim 21, Wee discloses the method according to claim 12, wherein in that the pixel groups are comprised of digitized scanned values of an audio signal ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Regarding Claim 22, Wee discloses the method according to claim 9, wherein the files contain image data, video data or audio data ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Regarding Claim 23, Wee discloses the method according to claim 12, wherein the files contain image data, video data or audio data ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Regarding Claim 25, Wee discloses the method according to claim 21, wherein the files contain image data, video data or audio data ("The data can be any type of media data including video data, audio data, image data, graphic data, and web page data," column 4, line 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 13-18, and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Wee as applied to claim 9 above, and Harper *et al.* US 20020124177 ("Methods for encrypting and decrypting electronically stored medical records and other digital documents for secure storage, retrieval and sharing of such documents").

Regarding Claim 13, Wee discloses encryption and decryption of digital data as described in claim 9. Wee does not explicitly disclose coding using symmetric coding

method. Harper teaches the method according to claim 9, wherein a symmetrical coding method is carried out ("The inventive encryption methods and systems utilize an essentially symmetric encryption and decryption algorithm in which a single set of keys is used in both the encryption and decryption processes," paragraph [0018]).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Harper's symmetric encryption method to Wee's data encoding and decoding method for the purpose of improved data security.

Regarding Claim 14, the combination Wee-Harper teaches the method according to claim 10, wherein a symmetrical coding method is carried out ("The inventive encryption methods and systems utilize an essentially symmetric encryption and decryption algorithm in which a single set of keys is used in both the encryption and decryption processes," paragraph [0018]).

Regarding Claim 15, the combination Wee-Harper teaches the method according to claim 12, wherein a symmetrical coding method is carded out ("The inventive encryption methods and systems utilize an essentially symmetric encryption and decryption algorithm in which a single set of keys is used in both the encryption and decryption processes," paragraph [0018]).

Regarding Claim 24, the combination Wee-Harper teaches the method according to claim 15, wherein the files contain image data, video data or audio data ("The data

can be any type of media data including video data, audio data, image data, graphic data, and web page data," Wee, column 4, line 4).

Regarding Claim 16, Wee discloses encryption and decryption of digital data as described in claim 9. Wee does not explicitly disclose coding using asymmetric coding method. Harper teaches the method according to claim 9, wherein an asymmetrical coding method is carried out ("A common encryption method used currently with regard to Internet transactions is the Rivest-Shamir-Aldeman (RSA) encryption algorithm (U.S. Pat. No. 4,405,829 to Rivest et al.), which relies on a public key (or asymmetric) protocol," paragraph [0008]).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Harper's asymmetric encryption method to Wee's data encoding and decoding method for the purpose of improved data security.

Regarding Claim 17, the combination Wee-Harper teaches the method according to claim 10, wherein an asymmetrical coding method is carried out ("A common encryption method used currently with regard to Internet transactions is the Rivest-Shamir-Aldeman (RSA) encryption algorithm (U.S. Pat. No. 4,405,829 to Rivest et al.), which relies on a public key (or asymmetric) protocol," paragraph [0008]).

Regarding Claim 18, the combination Wee-Harper teaches the method according to claim 12, wherein an asymmetrical coding method is carried out ("A common

encryption method used currently with regard to Internet transactions is the Rivest-Shamir-Aldeman (RSA) encryption algorithm (U.S. Pat. No. 4,405,829 to Rivest et al.), which relies on a public key (or asymmetric) protocol," paragraph [0008]).

8. Claims 26-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Wee as applied to claim 9, Wee-Harper as applied to claim 15 above, and further in view of Kimura *et al.* US 20040036635 A1 ("Multiple quality data creation encoder, multiple quality data creation decoder, multiple quantity data encoding decoding system, multiple quality data creation encoding method, multiple quality data creation decoding method, and multiple quality data creation encoding/decoding method").

Regarding Claim 27, Wee discloses encryption and decryption of digital data as described in claim 9, and further discloses data encryption using separate keys. Wee-Harper teaches symmetrical coding method for digital data. Wee-Harper does not explicitly disclose coding/decoding pixels values in gradation. Kimura teaches the method according to claim 15, wherein the color level of the pixel values is coded or decoded in graduations ("For example, when the data is an image, the reproduction quality is "image", the encoder sets the change information, encodes and sends the data. The gradation/resolution is intentionally made degraded by setting the change information to encode the data, sending, and diffusing the data decoded directly from the encoded data as a noise," paragraph [0264]).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Kimura's method of using image gradation in data encoding to

the combination Wee-Harper for the purpose of information scrambling and thus protecting data's security.

Regarding Claim 26, the combination Wee-Kimura teaches the method according to claim 9, wherein the color level of the pixel values is coded or decoded in graduations using a separate key ("For example, when the data is an image, the reproduction quality is "image", the encoder sets the change information, encodes and sends the data. The gradation/resolution is intentionally made degraded by setting the change information to encode the data, sending, and diffusing the data decoded directly from the encoded data as a noise," paragraph [0264], Kimura).

Regarding Claim 28, the combination Wee-Kimura teaches the method according to claim 21, wherein the color level of the pixel values is coded or decoded in graduations using a separate key ("For example, when the data is an image, the reproduction quality is "image", the encoder sets the change information, encodes and sends the data. The gradation/resolution is intentionally made degraded by setting the change information to encode the data, sending, and diffusing the data decoded directly from the encoded data as a noise," paragraph [0264], Kimura).

Regarding Claim 29, the combination Wee-Kimura teaches the method according to claim 22, wherein the color level of the pixel values is coded or decoded in graduations using a separate key ("For example, when the data is an image, the

reproduction quality is "image", the encoder sets the change information, encodes and sends the data. The gradation/resolution is intentionally made degraded by setting the change information to encode the data, sending, and diffusing the data decoded directly from the encoded data as a noise," paragraph [0264], Kimura).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cheng, H.; Xiaobo Li, "Partial encryption of compressed images and videos," Signal Processing, IEEE Transactions on, vol.48, no.8, pp.2439-2451, Aug 2000. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farras Abdelnour whose telephone number is 571-270-1806. The examiner can normally be reached on Mon. - Thurs. 7:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
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11/27/07